

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



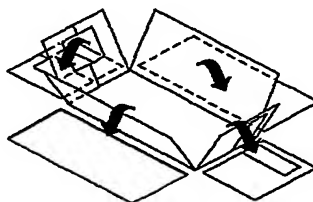
(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/051016 A1

- (51) International Patent Classification⁷: **E04B 1/348**
- (21) International Application Number:
PCT/GB2003/005253
- (22) International Filing Date: 3 December 2003 (03.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
0228172.3 3 December 2002 (03.12.2002) GB
- (71) Applicant and
(72) Inventor: WINDOW, John [GB/GB]; Bishops House, 37
The Green, Great Bowden, Market Harborough, Leicester-
shire LE16 7EU (GB).
- (74) Agent: SERJEANTS; 25 The Crescent, King Street, Le-
icester LE1 6RX (GB).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: MODULAR BUILDING UNIT AND METHOD OF ASSEMBLY



(57) Abstract: The invention provides a modular building unit comprising a shell formed from side wall lattice frameworks connected together by cross-beams at floor and ceiling height and end wall lattice frameworks secured to the ends of the resulting structure. The wall lattice frameworks are constructed at a first site where each is formed from an array of mutually parallel spaced structural uprights made from cold-formed structural steel sections, secured together by horizontal or diagonal cross-braces also made from cold-formed structural steel sections. The wall lattice frameworks are build up into the shell at a second site where each of the cross-beams, made from a cold-formed structural steel C-section, is connected to the wall lattice frameworks by being sleeved into or around lateral spur members extending from the wall lattice frameworks prior to being welded thereto.